[Billing Code 4140-01-P]

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The inventions listed below are owned by an agency of the U.S. Government and are available for licensing in the U.S. in accordance with 35 U.S.C. 209 and 37 CFR Part 404 to achieve expeditious commercialization of results of federally-funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for companies and may also be available for licensing.

FOR FURTHER INFORMATION: Licensing information and copies of the U.S. patent applications listed below may be obtained by writing to the indicated licensing contact at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852-3804; telephone: 301-496-7057; fax: 301-402-0220. A signed Confidential Disclosure Agreement will be required to receive copies of the patent applications.

SUPPLEMENTARY INFORMATION: Technology descriptions follow.

Miniature System for Manipulating Small Animals in High-Throughput Screening Small Molecules

Description of Technology: The invention pertains to a miniaturized plating and feeding system based on a 96-well microplate base and is intended to reduce manipulation of organisms as well as amounts of test drug/anesthetic, thereby mitigating waste. The kit comprises a feeder plate, transfer adaptor and receiver plate. The feeder plate is defined by, for example, a plastic 96-well plate with rounded wells. The rounded bottoms can dispense to or permit access to the test organism of liquid food or drug through about 7 holes of approximately 350 microns in diameter. A top portion of the well provides test organisms (e.g., drosophila, daphnia) with sufficient space to enjoy normal life-cycles without confinement stress. The feeder plate includes means for interfacing with complementary components of the transfer and receiver plates through receiving holes and complementary dowels or pins. A transfer adapter allows the interconnection of the feeder plate to the receiver plate. The transfer plate can be configured to be square or rounded for the transfer of organisms from the feeder plate to the receiver plate.

Potential Commercial Applications:

- Drug Development
- Toxicity Studies
- Drug Design

Competitive Advantages:

• Small animals

• High Throughput

• Space efficiency

• Resource economy

Development Stage:

• Early stage

• Prototype

Inventors: Maria De Los Angeles Jaime and Brian Oliver (NIDDK)

Intellectual Property: HHS Reference No. E-034-2015/0 - US Provisional Application No. 62/080,181 filed November 14, 2015

Licensing Contact: Michael Shmilovich, Esq.; 301-435-5019; shmilovm@mail.nih.gov

Collaborative Research Opportunity: The National Institute of Diabetes and Digestive and Kidney Diseases is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate or commercialize High-Throughput Small Animal Manipulation for Drug Design. For collaboration opportunities, please contact Marguerite J. Miller at millermarg@niddk.nih.gov.

LRKK2 Inhibitors: Novel Treatment for Intestinal Bowel Disorders

Description of Technology: Use of Leucine Rich Repeat Kinase 2 (LRRK2) inhibitors for the treatment of Intestinal Bowel Disorders (IBD) is disclosed. IBD is a broad term that describes conditions with chronic or recurring immune response and

inflammation of the gastrointestinal tract. Crohn's disease and ulcerative colitis, two common forms of idiopathic IBD, are chronic, relapsing inflammatory disorders of the gastrointestinal tract.

LRRK2 is a kinase encoded by a gene that contains a non-coding polymorphism (SNP). LRRK2 has been associated with and is a risk factor for inflammatory bowel disease. NIH inventors have shown that human cells expressing this SNP have increased levels of LRRK2 and, correspondingly, mice with increased levels of LRRK2 exhibit more severe Dextran Sulfate colitis. In various studies of the role of LRRK2 in cell signaling, NIH inventors have shown that increased levels of LRRK2 lead to increased pro-inflammatory cytokine secretion. Also, an inhibitor of LRRK2 is shown to abrogate the pro-inflammatory activity of LRRK2 both *in vitro* and *in vivo*.

Potential Commercial Applications: Treatment for or prevention of Intestinal Bowel Disorders.

Competitive Advantages:

• A LRRK2 inhibitor would be a unique form of anti-inflammatory therapy that will complement or compete with an array of cytokines in primary treatment for lBD.

• A LRRK2 inhibitor would provide a much needed alternate mode of therapy.

Development Stage:

• Early-stage

• In vitro data available

• In vivo data available (animal)

Inventors: Warren Strober, Ivan J. Fuss, Tetsuya Takagawa, Atsushi Kitani (all of NIAID)

Intellectual Property: HHS Reference No. E-070-2014/0 - US Provisional Application No. 61/993,637 filed May 15, 2014

Licensing Contact: Suryanarayana Vepa, Ph.D., J.D.; 301-435-5020; vepas@mail.nih.gov

Dated: January 22, 2015.

_____

Richard U. Rodriguez,
Acting Director,
Office of Technology Transfer,
National Institutes of Health.

[FR Doc. 2015-01610 Filed 01/28/2015 at 8:45 am; Publication Date: 01/29/2015]